

**REMARKS**

**I. Status of the Application**

By the present amendment, claim 20 is hereby added to more fully cover various implementations of the invention. Claims 1-20 are all the claims pending in the Application, with claims 1, 14 and 18 being in independent form. Claims 1-19 have been rejected.

The present amendment addresses each point of objection and rejection raised by the Examiner. Favorable reconsideration is respectfully requested.

**II. Claim Rejections under 35 U.S.C. §102**

The Examiner has rejected claims 1, 4, 6-10, 12, 14 and 17-18 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,079,767 to Perlman (hereinafter “Perlman”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

According to the MPEP, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (MPEP § 2131). Applicant respectfully submits that claims 1, 4, 6-10, 12, 14 and 17-18 positively recite limitations which are not disclosed (or suggested) by Perlman.

**A. Independent Claim 1**

Independent claim 1 recites (among other things):

A routing control system for use in a network having a plurality of nodes, said nodes including at least one master node and at least one slave node...

The grounds of rejection allege that the intermediate system nodes 101-104, 106-110 and 114-115, as disclosed in Perlman, correspond to “at least one master node,” as recited in claim 1.

The grounds of rejection also allege that the end system nodes 105, 111-113 and 116-118, as disclosed in Perlman, correspond to “at least one slave node,” as further recited in claim 1.

Further, in response to the arguments advanced in the Amendment filed on August 26, 2005, that the grounds of rejection have not pointed to any specific portion of Perlman which discloses or suggests that the intermediate system nodes 101-104, 106-110 and 114-115 control any aspect of the operation of the end system nodes 105, 111-113 and 116-118, the grounds of rejection allege that the intermediate system nodes do control aspects of routing of the end system nodes when an end node tries to communicate to another end node in a different domain. (10/31/05 Office Action, page 2). Applicant respectfully disagrees.

Perlman fails to provide any disclosure or suggestion whatsoever that the intermediate system nodes 101-104, 106-110 and 114-115 control any aspect of the operation of the end system nodes 105, 111-113 and 116-118. To the contrary, Perlman merely discloses that the intermediate system nodes forward data messages received from the end nodes. (Column 8, lines 7-20). That is, if anything, Perlman discloses that the intermediate system nodes 101-104, 106-110 and 114-115 control the forwarding of data messages that are received. However, Perlman does not disclose or suggest that the intermediate system nodes exhibit any control whatsoever over the operation of the end system nodes themselves.

Applicant notes that during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. (MPEP §2111). However, Applicant respectfully submits that the Examiner’s interpretation that the intermediate system nodes 101-104, 106-110 and 114-115, as taught in Perlman, corresponds to “at least one master

node,” as recited in claim 1, is not reasonable, as required by MPEP §2111. To the contrary, one of ordinary skill in the art would understand that a master node exhibits some sort of control over the operation of a slave node. Since, the intermediate system nodes 101-104, 106-110 and 114-115 disclosed in Perlman do not control the operation of the end system nodes 105, 111-113 and 116-118, rather, the system nodes control the forwarding processes performed by the intermediate system nodes themselves, the intermediate system nodes in Perlman cannot possibly correspond to “at least one master node,” as recited in claim 1, and the end system nodes disclosed therein cannot possibly correspond to slave nodes, as further recited in claim 1. (Column 7, lines 61-64).

Consequently, Perlman fails to provide any disclosure or suggestion that the intermediate system nodes and the end system nodes disclosed therein correspond to at least one master node and at least one slave node, respectively, as recited in independent claim 1. Thus, Applicant respectfully submits that claim 1 is allowable for *at least* these reasons.

Independent claim 1 also recites (among other things):

...a spanning tree producing portion provided  
in said master node which produces a spanning  
tree of said network based on connection  
information of said network and which delivers  
said spanning tree to each slave node whenever  
said connection information is received...

The grounds of rejection allege that the decision process 360, as disclosed in Perlman, corresponds to “a spanning tree producing portion,” as recited in claim 1. In response to Applicant’s arguments advanced in the Amendment filed on August 26, 2005, that the grounds of rejection have not pointed to any specific portion of Perlman which discloses or suggests that

any of the intermediate system nodes disclosed therein ever deliver a spanning tree to each end system node, the grounds of rejection allege that Perlman discloses that “link state packets” are forwarded to all nodes in the network. (10/31/05 Office Action, page 3). Thus, the grounds of rejection allege that the “link state packets” disclosed in Perlman, correspond to “a spanning tree of said network,” as recited in claim 1. Moreover, the grounds of rejection allege that the delivery of a link state packet from an intermediate system nodes 101-104, 106-110 and 114-115 to an end system nodes 105, 111-113 and 116-118, corresponds to a spanning tree producing portion provided in said master node which delivers said spanning tree to each slave node whenever said connection information is received, as further recited in claim 1.

Applicant respectfully disagrees with the grounds of rejection. Perlman fails to provide any disclosure or suggestion whatsoever that the “link state packets,” disclosed therein correspond to “a spanning tree of said network,” as recited in claim 1. In fact, Perlman teaches the complete opposite—that the “link state packets” disclosed therein are entirely different than the “spanning tree” calculated in decision process 360, which is performed by intermediate system nodes. (Column 7, lines 60-64; column 8, lines 52-56).

Indeed, as already discussed above, the pending claims must be given their broadest reasonable interpretation consistent with the specification. (MPEP §2111). However, Applicant respectfully submits that the Examiner’s interpretation that the “link state packets,” as taught in Perlman, correspond to “a spanning tree of said network,” as recited in claim 1, is not reasonable, as required by MPEP §2111.

To the contrary, one of ordinary skill in the art would understand that the disclosure provided in Perlman repeatedly distinguishes the “spanning tree” calculated therein as being a distinct and entirely different element from the “link state packets.” For instance, Perlman explicitly references each of these two elements separately, referring to each of these elements by a different name (i.e., “link state packet” as opposed to “a spanning tree”). (Column 8, line 34-56). What is more, Perlman expressly assigns different meanings to the terms “link state packet” and “a spanning tree.” Perlman discloses that “[t]he link state packet contains a list of active neighbors of the node generating the packet.” (Column 8, lines 35-36). In stark contrast, Perlman discloses that “[a] spanning tree is an ordered interconnection of all nodes in the network.” (Column 8, lines 55-56).

Therefore, in order for one of ordinary skill to interpret the “link state packets” disclosed in Perlman as corresponding to “a spanning tree of said network,” as recited in claim 1, one would have to completely ignore the explicit disclosure in Perlman that the “link state packets” disclosed therein are not “spanning trees.” Since Perlman expressly teaches away from the interpretation proposed by the Examiner and, hence, the Examiner’s proposed interpretation, is not reasonable, as required by MPEP §2111. Thus, contrary to the allegations in the grounds of rejection, Perlman does not disclose, and is incapable of suggesting, that the “link state packets” disclosed therein correspond to “a spanning tree of said network,” according to the term’s broadest reasonable interpretation as recited in claim 1.

Indeed, while Perlman does disclose that the decision process 360 performed by an intermediate system node is responsible for calculating a spanning tree, Perlman does not

disclose or suggest that after such a calculation, the intermediate system node then delivers a spanning tree to each slave node whenever connection information is received, as recited in claim 1. In fact, Perlman discloses quite the opposite—that each node in a network is responsible for calculating and updating its own spanning tree. (Column 8, lines 52-55; column 3, lines 23-29, lines 30-35).

Therefore, Perlman cannot possibly suggest that an intermediate system node delivers a spanning tree to each end system node whenever said connection information is received, as required by claim 1. Accordingly, Applicant respectfully submits that independent claim 1 is not anticipated by (i.e. is not readable on) the applied Perlman reference for *at least* these independent reasons. Further, Applicant respectfully submits that the dependent claims 4, 6-10 and 12 are allowable *at least* by virtue of their dependency on claim 1. Thus, Applicant respectfully requests that the Examiner withdraw these rejections.

**B. Independent Claim 14**

Independent claim 14 recites (among other things):

...a spanning tree producing portion which produces a spanning tree of said network based on connection information of said network and which delivers said spanning tree to each node of said network whenever said connection information is received...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 14. As such, it is respectfully submitted that claim 14 is patentably distinguishable over the cited

Perlman reference *at least* for reasons analogous to those presented above. Further, Applicant submits that the dependent claim 17 is allowable *at least* by virtue of its dependency on claim 14. Thus, the allowance of these claims is respectfully solicited of the Examiner.

**C. Independent Claim 18**

Independent claim 18 recites (among other things):

A method of controlling a routing table used in a network having a plurality of nodes, said nodes including at least one master node and at least one slave node...

Independent claim 18 also recites:

...producing, at said master node, a spanning tree of said network based on connection information of said network and which delivers said spanning tree to each slave node whenever said connection information is received...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 18. As such, it is respectfully submitted that claim 18 is patentably distinguishable over the cited Perlman reference *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

**III. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Meier**

The Examiner has rejected claims 2 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of U.S. Patent No. 6,826,165 to Meier *et al.* (hereinafter

“Meier”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

In order for the Examiner to maintain a rejection under 35 U.S.C. §103, Perlman, Meier, or some combination thereof, must teach or suggest all of the limitations of claims 2 and 15. Applicant respectfully submits that neither Perlman, Meier, nor any combination thereof, teaches or suggests all of the limitations of claims 2 and 15.

Claims 2 and 15 incorporate all the novel and non-obvious recitations of their base claims 1 and 14, respectively. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claims 1 and 14. Moreover, Meier fails to cure the deficient teachings of Perlman. Therefore, Applicant respectfully submits that the dependent claims 2 and 15 are allowable *at least* by virtue of their dependency on independent claims 1 and 14, respectively. Accordingly, Applicant respectfully requests that the Examiner withdraw these rejections.

#### **IV. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Lee**

The Examiner has rejected claims 3 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of U.S. Patent No. 6,122,283 to Lee *et al.* (hereinafter “Lee”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

Claims 3 and 16 incorporate all the novel and non-obvious recitations of their base claims 1 and 14, respectively. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claims 1 and 14. Further, Lee fails to cure the deficient teachings of Perlman. Therefore, Applicant respectfully submits that the dependent claims 3 and 16 are



allowable *at least* by virtue of their dependency on independent claims 1 and 14, respectively.

As such, Applicant respectfully requests that the Examiner withdraw these rejections.

**V. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Tsukakoshi and further in view of Ma**

The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Perlman, in view of U.S. Patent No. 6,496,510 to Tsukakoshi *et al.* (hereinafter “Tsukakoshi”), and further in view of U.S. Patent Publication 2005/0083936 to Ma (hereinafter “Ma”).

Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

Claim 5 incorporates all the novel and non-obvious recitations of its base claim 1. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claim 1. Additionally, neither Tsukakoshi nor Ma cures the deficient teachings of Perlman. Accordingly, Applicant respectfully submits that the dependent claim 5 is allowable *at least* by virtue of its dependency on independent claim 1. Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

**VI. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Sepulveda-Garese**

The Examiner has rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Perlman, in view of U.S. Patent No. 5,430,730 to Sepulveda-Garese *et al.* (hereinafter “Sepulveda-Garese”). Applicant respectfully traverses this rejection for *at least* the independent reasons stated below.

Claim 11 incorporates all the novel and non-obvious recitations of its base claim 1. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent

claim 1. Further, Sepulveda-Garese fails to cure the deficient teachings of Perlman.

Accordingly, Applicant respectfully submits that the dependent claim 11 is allowable *at least* by virtue of its dependency on independent claim 1. Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

**VII. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Green**

The Examiner has rejected claims 13 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of U.S. Patent No. 5,517,494 to Green *et al.* (hereinafter “Green”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

Claims 13 and 19 incorporate all the novel and non-obvious recitations of their base claims 1 and 18, respectively. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claims 1 and 14. Moreover, Green fails to cure the deficient teachings of Perlman. Therefore, Applicant respectfully submits that the dependent claims 13 and 19 are allowable *at least* by virtue of their dependency on independent claims 1 and 18, respectively. Hence, Applicant respectfully requests that the Examiner withdraw these rejections.

**VIII. New Claim 20**

Applicants respectfully submit that new claim 20 is allowable *at least* by virtue of its dependency on claim 1, and for the reasons set forth therein. No new matter has been added.

**Amendment under 37 C.F.R. § 1.116**  
**U.S. Serial No.: 09/944,203**

**Attorney Docket No.: Q66101**

**IX. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

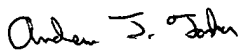
Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
\_\_\_\_\_  
Andrew J. Taska  
Registration No. 54,666

Date: January 30, 2006